

10-13-01

Practiti ner's Dock t No.

NEB-181

PATENT

Preliminary Classification: Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.



in the united states patent and trademark office

**Box Patent Application** Assistant Commissioner for Patents ₩ashington, D.C. 20231

## NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Romualdas VAISVILA

Richard D. MORGANT

Rebecca B. KUCERA

Toby E. CLAUS

Elisabeth A. RALEIGH

**WARNING:** 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i)

is filed supplying or changing the name or names of the inventor or inventors."

For (title):

METHOD FOR CLONING AND PRODUCING THE Msel RESTRICTION ENDONUCLEASE

#### Certification under 37 c.f.r. § 1.10\* (Express Mail label number is mandatory.) (Express Mail certification is optional.)

dressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

> M<u>eli\$sa A.</u> Jackson print name of person mailing paper) Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

\*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1]—page 1 of 11)

# 1. Typ f Applicat



This new application is for a(n)

(check one applicable item below)

	X	Original (nonprovisional)
		Design
		☐ Plant
WARN	ING:	Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WARN	IING.	: Do not use this transmittal for the filing of a provisional application.
NOTE:	TF	one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION RANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
[		Divisional.
ſ		Continuation.
[		Continuation-in-part (C-I-P).

## 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
  - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(New Application Transmittal [4-1]—page 2 of 11)

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WARNING: When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).

☐ The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

## 3. Papers Enclosed

A.	Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.15	53
	(Design) Application	_

- 66 Pages of specification (includes cover page)
- $\frac{3}{1}$  Pages of claims

WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page . . ." 37 C.F.R. § 1.84(c)).

## (complete the following, if applicable)

$\Box$	The enclosed drawing(s)	are photograph(s),	and there is also	attached a
	"PETITION TO ACCEPT	PHOTOGRAPH(S)	AS DRAWING(S)."	37 C.F.R.
	§ 1.84(b).	` '		· · · · · · · · · · · · · · · · · · ·
_				

- ☐ formal
- informal

## B. Other Papers Enclosed

- \_\_3\_ Pages of declaration and power of attorney
- \_\_\_\_ Pages of abstract
- $\underline{\phantom{a}}$  Other Statement re: Sequence Listing

## 4. Additional papers enclosed

	Amen	dment	to	claims
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- Cancel in this applications claims \_\_\_\_\_\_ before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
- Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
- □ Preliminary Amendment
- ☐ Information Disclosure Statement (37 C.F.R. § 1.98)
- ☐ Form PTO-1449 (PTO/SB/08A and 08B)
- ☐ Citations

(New Application Transmittal [4-1]—page 3 of 11)

5.

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	] :	Special	Comr	ments						
Œ	3	Other	Pap	ercopy of	sequenc	e listi	ng			
				(including	-					
NOTE:	the by app the by bei dec per	prior nor all or few plication be signature a statement of the signature o	nprovision of the contract of	onal application all the invented, and a copindication there uesting deletion declaration in filed accompan	n contained a tors named in by of the exec- con that it was n of the name the prior app nied by a copy uently joined i	a declaration In the prior apputed declarate Is signed) is sues of person(selication was In of the decision In a prior app	as required, oplication, to ion filed in a ubmitted. The ion are not filed under on granting §	the applichere is no the prior application of the copy must obtain the copy must of inventors \$ 1.47, the 1.47 statu	ation provided that ation being filed is new matter in the oplication (showing at be accompanied of the application and a copy of that is or, if a nonsigning of the subsequently	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
NOTE:	is d abi	directed, id breviation	dentify e togeth citizensh	each inventor b er with any oth nip of each inv	y full name ind her given nam	cluding family ne or initial, ar	name and a nd the resid	t least one g ence, post	ification to which in given name, without office address and or joint inventor. 37	t
NOTE:	as as is t	prescribe prescribe hat invent s paragra	d by § d by § torship ph acc	1.62, except a 1.63 is not filed set forth in the	as provided for I during the pe application pa the fee set for	or in § 1.53(d) endency of a r apers filed pu rth in § 1.17(	(4) and § 1. nonprovision rsuant to § i) is filed su	63(d). If an al application 1.53(b), unlo	oath or declaratior oath or declaration on, the inventorship ess a petition unde changing the name	7 2
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NOTE:	th m	e U.S. ap, ay be trea	plication ated as	n contains sub a continuation	ject matter in or continuat	addition to the tion-in-part, a	ne Internations the case i	nal Applica nay be, uti	re the completion on tion, the application lizing ADDED PAG ICATION CLAIMED	i E
				ion is made of <i>all</i> the ab				er 37 C.F	.R. § 1.41(c) o	r

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(New Application Transmittal [4-1]—page 4 of 11)





(The declaration or oath, along with the surcharge

(,,,,,	can be filed subsequently).
	Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inven	torship Statement
WARNING	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inve	entorship for all the claims in this application are:
X	The same.
	or
	Not the same. An explanation, including the ownership of the various claims a the time the last claimed invention was made,
	☐ is submitted.
	☐ will be submitted.
7. Langu	age
re-	n application including a signed oath or declaration may be filed in a language other than English in English translation of the non-English language application and the processing fee of \$130.00 quired by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).
X	English
	Non-English
	☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8. Assign	ment
X	An assignment of the invention to New England Biolabs, Inc.  32 Tozer Road; Beverly, MA 01915
	is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCU- MENT) ACCOMPANYING NEW PATENT APPLICATION" or ☑ FORM PTO 1595 is also attached.
	☐ will follow.
NOTE: "If and	an assignment is submitted with a new application, send two separate letters-one for the application d one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING:	A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

9. C rtifi d C py  Certified copy(ies) of application	on(s)				)
Country		Appln. No	).		Filed
Country	<del></del>	Appln. No	).		Filed
Country		Appin. No	).	· · · · · · · · · · · · · · · · · · ·	Filed
from which priority is claimed					
☐ is (are) attached.					
□ will follow.					
NOTE: The foreign application forming declaration. 37 C.F.R. § 1.55			aim for	priority must b	ne referred to in the oath or
NOTE: This item is for any foreign pour U.S. application or Internation § 120 is itself entitled to prior PAGES FOR NEW APPLICAT CLAIMED.	al Applica ity from a p TON TRAN	tion from wh prior foreign ISMITTAL W	ich this applica	application cla	nims benefit under 35 U.S.C. plete item 18 on the ADDED
10. Fee Calculation (37 C.F.R	l. § 1.16	5)			
A.   Regular application					•
	CLA	MS AS F	ILED		
Number filed	Nun	nber Extra	l	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$898-200 710.0
Total Claims (37 C.F.R. § 1.16(c)) 17 – 20	0 =	0	×	\$ 18.00	0.00
Independent Claims (37 C.F.R. 4 § 1.16(b)) – 3	\	1	×	\$ 78.00	80.00
Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d))	Yes		+	\$260.00	270.00
☐ Amendment cancelling	ng extra	claims is	enclo	sed.	
☐ Amendment deleting	multiple	e-depende	encies	is enclosed	l.
☐ Fee for extra claims	is not b	eing paid	at thi	s time.	
NOTE: If the fees for extra claims are a prior to the expiration of the notice of fee deficiency. 37 (	time perio	od set for rea			
Fil	ling Fee	Calculation	on		\$ 1060.00
B. Design application (\$310.00—37 C.F.R.	§ 1.16(1	7))			
Fi	ling Fee	Calculation	on		\$

(New Application Transmittal [4-1]—page 6 of 11)

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FORM 4-1

	$\bigcirc$
C.  Plant application (\$480.00—37 C.F.R. § 1.16(g))	
Filing fee calculation	\$
11. Small Entity Statement(s)	
Statement(s) that this is a filing by a small entity under is (are) attached.	37 C.F.R. § 1.9 and 1.27
WARNING: "Status as a small entity must be specifically established in each the status is available and desired. Status as a small entity in one affect any other application or patent, including applications or indirectly dependent upon the application or patent in which the state refiling of an application under § 1.53 as a continuation, division, or a continued prosecution application under § 1.53(d)), or the filing of a new determination as to continued entitlement to small entity state application. A nonprovisional application claiming benefit under 35 365(c) of a prior application, or a reissue application may rely or application or in the patent if the nonprovisional application or the reference to the statement in the prior application or in the patent and status as a desired. The payment of the small entity basic statutory filing fee will for purposes of this section." 37 C.F.R. § 1.28(a)(2).	application or patent does not patents which are directly or tatus has been established. The recontinuation-in-part (including of a reissue application requires tus for the continuing or reissue 5 U.S.C. § 119(e), 120, 121, or a statement filed in the prior preissue application includes a tent or includes a copy of the small entity is still proper and be treated as such a reference
WARNING: "Small entity status must not be established when the person or person unequivocally make the required self-certification." M.P.E.P., 1996 (emphasis added).	sons signing the statement § 509.03, 6th ed., rev. 2, July
(complete the following, if applicable)	•
<ul> <li>Status as a small entity was claimed in prior application</li> </ul>	
is being claimed for this application under:	, from which benefit
35 U.S.C. § 119(e),	
□ 120, ·	
□ 121,	
□ 365(c),	
and which status as a small entity is still proper and	
A copy of the statement in the prior application in	s included.
Filing Fee Calculation (50% of A, B or C above)	•
\$ 530.00	
NOTE: Any excess of the full fee paid will be refunded if small entitiy status is estained are filed within 2 months of the date of timely payment of a full fee. Extendable under § 1.136. 37 C.F.R. § 1.28(a).	ablished and a refund request The two-month period is not
12. Request for International-Type Search (37 C.F.R. § 1.104(	d))
(complete, if applicable)	
Please prepare an international-type search report for this when national examination on the merits takes place.	s application at the time

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	_				
		Enclosed  No filing fee is to be paid at this time.  (This and the surcharge required by 37 C.F.R. § subsequently.)	1.16(e)	can be pa	aid
X	] Enc	losed			
	X	Filing fee	\$ -	530.00	
		Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$ .	40.00	_
		Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$ .		
		For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$ .		
		Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$		
		Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$		
NOTE:	failing to 37 C.F. either to	R. § 1.21(I) establishes a fee for processing and retaining any appliance complete the application pursuant to 37 C.F.R. § 1.53(f) and this R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefine basic filing fee must be paid, or the processing and retention fer figure from notification under § 53(f).	s, as well a it of a prior ee of § 1.2:	s the change U.S. applicat I(I) must be p	s to tion,
		Total fees enclosed	\$ 570	.00	
4. M	ethod •	of Payment of Fees			
[2	S Che	eck in the amount of \$_570.00			
	_	arge Account No	in the	amount	of
	\$ A c	luplicate of this transmittal is attached.			
NOTE:	Fees si § 1.22	nould be itemized in such a manner that it is clear for which purpose (b).	the fees a	re paid. 37 C.	F.R.

(New Application Transmittal [4-1]—page 8 of 11)





### 15. Auth rization t Charge Additi nal Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

- The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 14-0740
  - 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
  - 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

- 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).
- 37 C.F.R. § 1.17 (application processing fees)
- NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).
  - ☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(New Application Transmittal [4-1]—page 9 of 11)



NOTE: ". . . Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

- ☐ Refund

**Reg. No.** 30901

Tel. No. (978) 927-5054 X:292

Customer No.

SIGNATURE OF PRACTITIONER Gregory D. Williams General Counsel

(type or print name of attorney)
New England Biolabs, Inc.
32 Tozer Road

P.O. Address

Beverly, MA 01915

(New Application Transmittal [4-1]—page 10 of 11)





	(ci pr sta th	o ration by ref r nc f add d pag s heck the following item if the application in this transmittal claims the benefit of ior U.S. application(s) (including an international application entering the U.S. age as a continuation, divisional or C-I-P application) and complete and attach be ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
		Number of pages added
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"  Number of pages added
X	State	ment Where No Further Pages Added
		no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)
	$\square$	This transmittal ends with this page.

(New Application Transmittal [4-1]—page 11 of 11)